
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2011; month=1; day=20; hr=16; min=21; sec=33; ms=563;]

Validated By CRFValidator v 1.0.3

Application No: 10586080 Version No: 2.0

Input Set:

Output Set:

Started: 2011-01-10 17:21:13.762

Finished: 2011-01-10 17:21:15.298

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 536 ms

Total Warnings: 33

Total Errors: 0

No. of SeqIDs Defined: 34

Actual SeqID Count: 34

Error code		Error Description									
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(1)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(2)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(3)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(4)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(5)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(6)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(7)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(8)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(9)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(10)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(11)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(12)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(13)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(14)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(15)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(16)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(17)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(18)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(19)
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(20)

Input Set:

Output Set:

Started: 2011-01-10 17:21:13.762

Finished: 2011-01-10 17:21:15.298

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 536 ms

Total Warnings: 33
Total Errors: 0

No. of SeqIDs Defined: 34

Actual SeqID Count: 34

Error code Error Description

This error has occured more than 20 times, will not be displayed

SEQUENCE LISTING

```
<110> Ark Therapeutics Limited
      Ahlroth, Mervi
      Schenkwein, Diana
      Airenne, Kari Juhani
      Yla-Herttuala, Seppo
      Laitinen, Olli
<120> Integrase Fusion Proteins and Their Use with Integrating Gene
      Therapy
<130> GJE.7664
<140> 10586080
<141> 2011-01-10
<150> PCT/GB2005/000115
<151> 2005-01-14
<150> GB0400814.0
<151> 2004-01-14
<160> 34
<170> PatentIn version 3.3
<210> 1
<211> 31
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 1
ccttaattaa atgtttttag atggaataga t
                                                                    31
<210> 2
<211> 26
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 2
                                                                    26
gctctagaat cctcatcctg tctact
<210> 3
<211> 41
<212> DNA
```

<213> Artificial

```
<220>
<223> Primer
<400> 3
tatggcctct caggccatta ttaatcctca tcctgtctac t
                                                                    41
<210> 4
<211> 31
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 4
                                                                    31
attcaccact agtgctccaa aaaaaaagcg c
<210> 5
<211> 41
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 5
                                                                    41
tatggcctct caggccatta ttataccaca aagtgactgc c
<210> 6
<211> 36
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 6
ggggaccact ttgtacaaga aagctgggtt atggcc
                                                                    36
<210> 7
<211> 34
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 7
tctcaggcca ttattatacc acaaagtgac tgcc
                                                                    34
<210> 8
```

<211> 36

```
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 8
                                                                    36
ggggaccact ttgtacaaga aagctgggta ttatta
<210> 9
<211> 18
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 9
atcctcatcc tgtctact
                                                                    18
<210> 10
<211> 31
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 10
gggacaagtt tgtacaaaaa agcaggctat g
                                                                    31
<210> 11
<211> 54
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 11
                                                                    54
catcaccatc accatcacct ggtgccgcgc ggcagctttt tagatggaat agat
<210> 12
<211> 18
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 12
ggggaaagaa tagtagac
                                                                    18
```

```
<210> 13
<211> 21
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 13
                                                                    21
gccacacaat catcacctgc c
<210> 14
<211> 19
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 14
                                                                    19
attaaccctc actaaaggg
<210> 15
<211> 19
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 15
aatacgactc actataggg
                                                                    19
<210> 16
<211> 22
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 16
                                                                    22
caatcaaagg agatatacca cg
<210> 17
<211> 20
<212> DNA
<213> Artificial
<220>
```

<223> Primer

<400>	17	
tcgacct	gca ggcgcgccga	20
<210>	18	
<211>	15	
	DNA	
<213>	Artificial	
<220>		
<223>	Primer	
<400>	18	
ctctctt	aag gtage	15
<210>	19	
<211>	15	
<212>	DNA	
<213>	Artificial	
<220>		
	Primer	
12237	I I I I I I I I I I I I I I I I I I I	
<400>	19	
gctacct	taa gagag	15
<210>	20	
<211>	33	
<212>	DNA	
<213>	Artificial	
<220>		
<220> <223>	Primer	
\223/	FITHEL	
<400>	20	
	gtac tgctagagat tttccacagc atg	33
<210>	21	
<211>	25	
<212>	DNA	
<213>	Artificial	
<2205		
<220> <223>	Primer	
~∠∠ <i></i> >>	t TIM6T	
<400>	21	
		25
<210>	22	
<211>	29	
<212>	DNA	

<213> Artificial

<220>		
<223>	Primer	
<400>	22	
cagtga	atta gcccttccag tactggtac	29
<210>	23	
<211>	29	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Primer	
<400>		
cagtac	tgga agggctaatt cactgcatg	29
-07.C	24	
<210>		
<211>		
<212>		
<∠13>	Artificial	
<220>		
	HIV-1 donor DNA substrate	
\223/	HIV-I GONOI DNA SUBSCIACE	
<400>	24	
	gaag ggctaattca ctgcatg	27
9 9	g-u-g - g g g	
<210>	25	
<211>	27	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	HIV-1 donor DNA substrate	
<400>	25	
catgac	cttc ccgattaagt gacgtac	27
<210>		
<211>		
<212>		
<213>	Artificial	
0.7.7		
<220>		
<223>	HIV-1 donor DNA substrate	
- 4.0.0		
<400>		~ -
catgct	gtgg aaaatctcta gcagtac	27

<210> 27 <211> 27

```
<212> DNA
<213> Artificial
<220>
<223> HIV-1 donor DNA substrate
<400> 27
                                                                     27
gtacgacacc ttttagagat cgtcatg
<210> 28
<211> 180
<212> DNA
<213> Artificial
<220>
<223> Plasmid
<220>
<221> misc_feature
<222> (153)..(153)
<223> n is a, c, g, or t
<400> 28
cccttttcta ttagaaccgg ataacatcaa cggcaaaacg tgcacagcaa gcgcgctatg
                                                                   60
tcataatact cgatgccaca atcccttgca cttgtgctgg gagtcactag acgacaacaa
                                                                 120
aggcagaaac tggtgcccgg gtcccaacgg ggnatgtgtc catgcggtgg tttgtttaag
                                                                    180
<210> 29
<211> 180
<212> DNA
<213> Physarum polycephalum
<400> 29
cccttttcta ttagaaccgg ataacatcaa cggcaaaacc tgcacagcat cgcacctatg
                                                                   60
tcataatact cgatgccaca atcccttgca cttgtgctgg gagtcactag acgacaacaa
                                                                 120
aggcagaaac tggtgcccgg gtcccaacgg gggatgtgtc catgcggtgg tttgtttaag
                                                                    180
<210> 30
<211> 180
<212> DNA
<213> Artificial
<220>
<223> Plasmid
<220>
<221> misc_feature
```

<222> (55)..(55)

```
<223> n is a, c, g, or t
<400> 30
cccttttcta ttagaaccgg ataacatcaa cggcaaaacc tgcacagcat cggcnctatg
tcataatact cgatgccaca atcccttgca cttgtgctgg gagtcactag acgacaacaa
                                                                 120
aggcagtttg accagcccgg gtcccaacgg gggatgtgtc catgcggtgg tttgtttaag
                                                                   180
<210> 31
<211> 29
<212> DNA
<213> Artificial
<220>
<223> 5'LTR
<400> 31
cagtactgga agggctaatt cactgcatg
                                                                    29
<210> 32
<211> 29
<212> DNA
<213> Artificial
<220>
<223> 5'LTR
<400> 32
catggtcatg accttcccga ttaagtgac
                                                                    29
<210> 33
<211> 25
<212> DNA
<213> Artificial
<220>
<223> 3'LTR
<400> 33
                                                                    25
ctgtggaaaa tctctagcag tacta
<210> 34
<211> 33
<212> DNA
<213> Artificial
<220>
<223> 3'LTR
<400> 34
```

33

gtacgacacc ttttagagat cgtcatgatg atc